

## **ABSTRACT**

A method of arranging, and a system of hierarchically arranged optical virtual private networks in a carrier's carrier virtual private network (VPN) are disclosed. The system has the hierarchical virtual private networks configured such that each VPN in the hierarchical network is affiliated to another VPN as a father or son VPN. Each son VPN has only one father VPN, and each father VPN is responsible for services and connections to its affiliated son VPNs. The system of hierarchical optical VPNs disclosed is particularly useful for allowing a carrier's carrier to provide the management functions for the clients of the carrier.